



DATE: October 26, 2022
TO: Council Infrastructure Committee
FROM: Director of Public Works
SUBJECT: Review of the FY23 Pavement Improvement Project

RECOMMENDATION

That the Council Infrastructure Committee (CIC) reviews and comments on the FY23 Pavement Improvement Project, Project No. 05240.

SUMMARY

The FY23 Pavement Improvement Project (PIP) is currently under design and tentatively calls for the rehabilitation of 87 street segments and preventive maintenance of 26 street segments for a total of 113 segments (Attachment II). Proposed improvements will improve street surfaces, add bike lanes, and upgrade curb ramps to the latest ADA requirements.

The project budget is \$15,000,000, and is funded from Gas Tax, Measure BB, Measure B, Vehicle Registration Fees, Street System Improvement, and anticipated Road Repair and Accountability Act (SB1) funds, as well as street impact fees paid by Waste Management of Alameda County (WMAC).

This project is categorically exempt from environmental review under Section 15301(c) of the California Environmental Quality Act (CEQA) Guidelines for the operation, repair, maintenance, or minor alteration of existing facilities.

BACKGROUND

The PIP involves one of four types of treatments:

Pavement Rehabilitation:

- 1) Standard overlay of the existing street pavement with new Hot Mix Asphalt surfacing.
- 2) Cold-In-Place Recycling (CIR), which involves removing the top layer of asphalt, mixing the removed aggregates with a recycling agent and other additives on-site,

replacing this pavement material onto the same roadway, then applying a Hot Mix Asphalt overlay.

- 3) Full Depth Reclamation (FDR), which consists of pulverizing and mixing distressed asphalt and underlying pavement materials with or without the addition of stabilizing agents; using the resulting material as a base for the renewed pavement structure and adding a new Hot Mix Asphalt cap.

Preventive Maintenance:

- 4) Varying combinations of: crack sealing, 6-inch spot repair and micro-surfacing.

Street selection for the PIP is based on several criteria described below:

- **Technology** – The Pavement Management Program (PMP) evaluates current and predicts future roadway conditions. It provides logical and efficient methods of identifying street rehabilitation needs. It also determines the most cost-effective allocation of funds to the street segments needing preventive maintenance, rehabilitation or reconstruction. Staff utilized the PMP to compile an initial list of recommended streets. This list is then revised to consider other criteria and project budget allocation parameters.
- **Social Equity** – Whether a particular area of the City has received its fair share of improvements in the past.
- **Internal Reports** - Reports from the City’s Maintenance Services staff on streets needing repair were considered.
- **Council Members Input** – Council member requests for selecting streets were considered.
- **Public Input** - Public requests for selecting streets were considered.
- **Geographic Location** – Selecting streets in close vicinity to help lower construction bids were considered.
- **Funding Availability** – Available funding and potential for obtaining outside grant funding was evaluated.

The Pavement Condition Index (PCI) is an overall rating of road conditions. The PCI of each arterial and collector street segment is evaluated by an independent third-party every other year, and each residential street segment is evaluated every five years.

<u>PCI Rating</u>	<u>Description</u>
100	This rating is given to newly constructed or rehabilitated roadways.

85 - 99	Highly functional roadway. No action required.
70 - 85	Roadway can be maintained ("preventive maintenance") with crack sealing, slurry seals, micro-surfacing, and some minor, localized pothole repairs. As the roadway pavement ages, preventive maintenance may not be effective after a few maintenance cycles.
40 - 70	Extensive "dig-outs," grinding, fabric, or asphalt overlays may be required to maintain (or "rehabilitate") roadway.
0 - 40	Roadway requires complete reconstruction using full depth reconstruction, cold in place recycling, or hot in-place recycling methods. If a street deteriorates beyond certain points, it becomes exponentially more expensive to bring that street back to the desired standard.

As part of the 2018 Capital Improvement Program (CIP) agenda item at the November 29, 2017¹ CIC meeting, the CIC reviewed and agreed to the following budget allocations for annual pavement improvement projects:

- Minimum 20% for preventive maintenance (streets with PCI of 70-85).
- Minimum 10% for deteriorated streets (streets with PCI of 0-30).
- Minimum 15% for streets located in Industrial Hayward as recommended by the Economic Development Strategic Plan in 2014.

DISCUSSION

The plans and specifications for the FY23 PIP are currently in design and expected to be complete in February 2023. Based on staff's analysis using the criteria described above, the project parameters are as follows:

Project Budget Allocation	Goal	Current Performance	Difference
Preventive Maintenance Treatment	20% minimum	10%	-10%
Streets Located in Industrial Hayward	15% minimum	34%	+19%
Streets with PCI Less than 30	10% minimum	76%	+66%

For the FY23, the project budget allocation is skewed towards streets in very poor condition (PCI less than 30) due to various reasons:

- Staff strive to increase our City-wide PCI from its current score of 70 to 75 by 2025. This can be achieved by more heavily focusing on streets in poor condition.
- Longwood Winton Grove and Santa Clara neighborhood streets, such as: Longwood Ave, Fuller Ave, Elmwood Lane, Redbud Lane, which are in very poor condition with

¹ <https://hayward.legistar.com/LegislationDetail.aspx?ID=3216497&GUID=3338D0E9-5E80-437E-8EC8-CDEFA3459426&Options=&Search=>

high number of resident requests, have been included in order to improve and increase social equity in distribution of City services.

- The establishment of the Old Highlands (OHHA) Assessment District requires the inclusion of streets from the area (Parkside Dr, Home Ave, Hilcrest Ave, Call Ave, Chronicle Dr). This will complete City’s obligation to pave all OHHA streets within 3 years. This accelerates the City’s original timeline of 5 or 6 years.

This selection requires both judgement and experience. Staff has engaged an experienced consultant, Pavement Engineering, Inc., (PEI) to confirm the selection of streets segments, the approximate level of treatment for each and provide engineering support services.

In conjunction with the FY23 PIP, the City’s adopted Strategic Roadmap also includes adding 10 miles of bike lane striping annually. As part of this project, up to 6.6 lane miles of bike lane striping are being considered to be installed. Staff is currently reviewing feasibility of installing bike lanes at the following locations:

- Longwood Ave, Hesperian Blvd to Klamath Rd (1.0 miles)
- Thelma St, Memorial Wy to Longwood Ave (0.8 miles)
- Elmwood St, Fuller Wy to Amador St (0.8 miles)
- Depot Rd, Industrial Pkwy to West End (2.2 miles)
- Cabot Blvd, Depot Rd to North End (1.8 miles)

ECONOMIC IMPACT

This project will have a positive impact on the community by improving paving conditions, upgrading curb ramps to ADA standards, and improving striping at crosswalks and bike lanes for better visibility. These enhancements will make the City safer for all drivers, pedestrians, and bicyclists, and increase property values.

FISCAL IMPACT

This item is fully funded by the City’s CIP and will have no impact on the General Fund. The estimated project funding sources are as follows:

• 210 - Gas Tax	\$50,000
• 211 – RRAA (SB1)	\$3,350,000
• 212 - Measure BB – Local Transportation	\$3,350,000
• 215 - Measure B – Local Transportation	\$600,000
• 218 – Vehicle Registration Fee	\$1,025,000
• 450 – Street System Improvement	\$1,050,000
• Street Impact Fee (WMAC)	\$500,000
• Contribution from the City’s Accumulated Direct Local Distribution	<u>\$5,075,000</u>

Total: \$15,000,000

STRATEGIC ROADMAP

This agenda item supports the Strategic Priority to invest in Infrastructure. Specifically, this item relates to the implementation of the following project(s):

- Part N5: Maintain Pavement Improvement
- Part N5a: Maintain Pavement Condition Index (PCI) at 70.
- Part N5c: Construct various OHHA Pavement Improvements
- Part N8b: Add 10 lane miles of bike lanes per year
- Part N8d: Implement safe routes to school

SUSTAINABILITY FEATURES

The project requires the contractor to recycle all construction and demolition debris generated from the project.

This project is consistent with City's Complete Streets Policy and improves travel for all users including:

- Additional bike lanes and sharrows for bicyclists
- Improved pavement for motorists
- More visible pavement markings for pedestrians, including near school zones
- New or upgraded curb ramps to meet the recently revised Caltrans standards for pedestrians

The project satisfies the following General Plan policies:

- PFS-7.10 Recycled Products or Processes for Capital Projects
- HQL-2.5 Safe Routes to School
- HQL-2.6 Education on Sharing the Road
- M-1.7 Eliminate Gaps (in pedestrian networks)
- M-3.1 Serving All Users
- M-5.1 Pedestrian Needs
- M-5.6 Safe Pedestrian Crossings
- M-6.2 Encourage Bicycle Use

PUBLIC CONTACT

Following the award of the construction contract, a preliminary notice explaining the project will be posted and distributed to all residents and businesses along the affected streets. After the construction work has been scheduled, signs on barricades will be posted seventy-two hours prior to commencement of work indicating the date and time of work for each street. Residents will be advised to park their vehicles on side streets outside of the work area during the period when the streets are being treated.

NEXT STEPS

Submit plans, specifications, and call for bids for Council approval	February 2023
Bid Opening	March 2023
Award of Contract	April 2023
Start of Construction	May 2023
End of Construction	October 2023

Prepared by: Yama Farouqi, Associate Civil Engineer
Kathy Garcia, Deputy Director of Public Works

Recommended by: Alex Ameri, Director of Public Works

Approved by:



Kelly McAdoo, City Manager